

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES 1 5	
2. AMENDMENT/MODIFICATION NO. 0003		3. EFFECTIVE DATE 14-May-2001		4. REQUISITION/PURCHASE REQ. NO. W26GLG-1078-2282		5. PROJECT NO.(If applicable)	
6. ISSUED BY CONTRACTING OFFICE (CA/CW) US ARMY ENGR DIST NORFOLK ATTN: CENAO-CT 803 FRONT STREET NORFOLK VA 23510-1096		CODE DACA65		7. ADMINISTERED BY (If other than item 6)		CODE	
				See Item 6			
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				X		9A. AMENDMENT OF SOLICITATION NO. DACA65-01-R-0015	
				X		9B. DATED (SEE ITEM 11) 23-Apr-2001	
						10A. MOD. OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A.THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B.THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C.THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D.OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) AMENDMENT NO. 0003 TO DACA65-01-R-0015							
<small>Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.</small>							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
_____ (Signature of person authorized to sign)				BY _____ (Signature of Contracting Officer)		14-May-2001	

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SPECIFICATIONS

1. Section 00010: BID SCHEDULE HAS BEEN REPLACED IN ITS ENTIRETY.
2. Section 02737, Paragraph 1.2.B, Page 1, add the following to the first sentence: "replacing frame and covers and exterior mortar repairs as necessary."
3. Section 02737, Paragraph 2.6, Page 5, delete paragraph "Manhole Steps" in its entirety.
4. Section 02737, Paragraph 2.7, page 5, and Paragraph 3.7, Page 8, delete paragraphs "Manhole Inserts" in their entirety.
5. Section 02737, Paragraph 3.2.I, Page 7, delete sentence in its entirety.
6. Section 02737, Paragraph 2.3, "EPOXY COATING" Page 5, in the first sentence after "404" and "or 405".
7. Section 02737, Paragraph 1.7, Page 3, add new item "I." as follows: The manhole rehabilitation system manufacturer's letter of certification that the materials used for patching, infiltration control and grouting mixes are compatible with the manhole rehabilitation system.
8. Section 02737, Paragraph 1.7.D, Page 3, replace "supplier's" with "manufacturer's" and add the following sentence: "In addition, a manufacturer's representative of the manhole lining/protective coating system shall provide at least two days of on-site observation and site specific recommendations relative to surface preparation, handling, application and curing of its product."
9. Section 02737, Paragraph 1.7.F, Page 3, replace "CIPP" with "manhole lining".
10. Section 02737, Paragraph 3.4, "EPOXY COATING INSTALLATION", Page 7, add the following to the end of the Paragraph: "During application, a wet film thickness gage meeting **ASTM D4414 - Standard Practice for Measurement of Wet Film Thickness of Organic Coatings by Notched Gages** shall be used to ensure a monolithic coating and uniform thickness during application."

DRAWINGS

11. Sheet C-3 change matchline text from "SEE SHEET NO. 2" to "SEE SHEET NO. C-4".
12. Sheet C-7 Revision "a" has been added. Profile for MH 601 TO MH 607 has been corrected.

13. Sheet C-11, PR-1, and PR-2 Revision "a" has been added. The following buildings have been included for lateral replacement: 2808, 2809, 2810, 2841, 2842, 2843, 2844, 2845, 2846, 2847, 2848, 2849, 2850, 2851, 2852, 2853, 2854, 2855, 2856, 2857, 2858. Total additional base length is approximately 80' of 6" pipe. Total additional Option length is approximately 1,275' of 6" pipe. Additional wyes are approximately 10 and additional clean-outs are approximately 22.

14. Sheet PR-9 Revision "a" has been added. Pipe Rehab Descriptions added on pipe segment MH182 to MH184.

15. Sheet PR-11 Revision "a" has been added. The following note has been inserted for the pipe segment between Manhole 195 and 5:

"Contractor shall remove and replace one existing support pier located in stream crossing between Manholes 195 and 5. The north stream bank shall require clearing and grading for access and restoration with 6 inch stone. After removal of existing pier the contractor shall excavate to bedrock. New pier shall be constructed using 24 inch HDPE pipe filled with 3000 psi concrete setting vertically on bedrock and conforming to the bottom of pipe at the top. Bedrock shall be drilled to receive six #6 rebar. Rebar shall run full height of pier. Pier height is approximately 12 lf.

Contractor shall pack void with non-shrink grout between pipe and pier at the neighboring support pier."

16. Sheet C-15 delete **STANDARD REPLACEMENT STEP** detail and notes in their entirety.

17. Sheet C-16 delete **SITE 4 PLAN - WAREHOUSE ST WASHRACK** in its entirety. Site 4 Washrack drainage work project requirements (Diversion structure and outfall piping) is shown on Sheet PR-17.

18. Sheet C-18 under "**TYPICAL TRENCH/BACKFILL DETAIL**", replace "FLOWABLE FILL" with the following; "NO. 57 GRAVEL PLACED AT 12" LIFTS AND COMPACTED WITH TWO PASSES USING A PLATE TAMBER". Under "**PAVEMENT PATCHING DETAIL**" replace "COHESIONLESS MATERIAL" with "NO 57 GRAVEL". Under "**BITUMINOUS PAVEMENT PATCHING**" detail, replace "COMPACTED BACKFILL" with "NO 57 GRAVEL".

19. "PIPE REHABILITATION LEGEND" Clarification Point for Sheets PR-1 THRU PR-19. The encircled NO. 1 and its corresponding DESCRIPTION "SERVICE CONNECTION POINT" is depicted on these drawings as the line weight "EXISTING SANITARY SEWER" and are the approximate locations for service laterals to active buildings.

20. Sheets MHR-1 thru MHR-5, the following sentence shall be added to Note 1: "Manholes located in paved and gravel areas shall have their tops adjusted to finish grade."

21. Sheet MHR-6 delete Install Frame Seal requirement from manholes 155A and 155B.
22. Sheets MHR-6, MHR-7, AND MHR-8. The following manholes shall be raised a minimum of six inches above grade: 17, 18, 19, 21, 23, 26, 27, 29, 32, 33, 35, 41, 45, 48, 56, 58, 66, 72, 73, 74, 75, 76, 79, 82, 86, 87, 98, 99, 100, 101, 112, 113, 114, 115, 117, 119, 121, 122, 123, 124, 128, 129, 130, 133, 134, 154, 157, 159, 163, 164, 165, 166, 168, 179, 180, 181, 182, 184, 185, 186, 187, 189, 190, 205, 307, 308, 311, 312, 317, 319, 322, 323, 327, 328, 329, 332, 334, 335, 336, 339, 340, 341, 342, 343, 359, 360, 361, 362, 363, 367, 368, 378, 382, 383, 384, 385, 388, 389, 390, 391, 393, 394, 395, 420, 428, 429, 431, 432, 433, 434, 436, 438, 439, 455, 457, 458, 461, 462, 464, 476, 478, 484, 495, 496, 502, 545, 547, 549, 551, 553, 555, 556, 557, 570, 572, 573, 585, 586, 587, 588, 593, 594, 595, 597, 625, 628, 631, 632, 633, 634, 641, 642, 650, 654, 656, 660, 661, 662, 663, 665, 666, 670, 676, 689, 690, 691, 692, 705, 716, 717, 719, 720.
23. Sheets MHR-6, MHR-7, AND MHR-8. The following columns shall be deleted from the tables in their entirety: #7 (Replace Steps), #14 (Enclave) and #15 (Non-Enclave).
24. Sheets MHR-6, MHR-7, AND MHR-8. Change the title for column #12 from "Install Watertight Cover/Raise" to "Install Frame Seal".
25. Sheets MHR-6, MHR-7, and MHR-8 under "Replace Frame & Cover" column add an "X" to the following manholes; 14, 49, 69, 84, 85, 132, 158, 195, 206, 330, 387, 475, and 548.
26. Sheet C-16 under **TYPICAL LATERAL CONNECTION DETAIL**, add the phrase "UNDER OPTION A" to the encircled LEGEND number 2 note. The complete note shall read, "NEW LATERAL TERMINATES AT EXISTING GREASE TRAP UNDER OPTION A".
27. Sheet PR-16, Revision "a" has been added. Manhole rims and inverts added.
28. Sheet PR-17, Revision "a" has been added. OWS #3 has been renamed to Wash Rack #4 and more detail provided for the diversion structure installation.
29. Sheet PR-18, Revision "a" has been added. Manhole rims and inverts added.

Note: In addition to the copies of sheets provided in Amendment 2 (i.e., C-20; C-21; MHR; MHR-1; MHR-2; MHR-3; MHR-4; MHR-5; PR AND PR-1 THRU PR19) the following .cal sheets were also given to provide improved clarity; C-3, R-1, R-2, R-3, and R-4.

Solicitation clarification

Information on the results of the CCTV survey are provided under the Plans File Name "A01r0015.exe" with the Description "Download Bundle CAL& Specs". Three PDF files provide data on 1) CCTV Footage summary FT Pickett, 2) CCTV Inspections FT Pickett, and 3) CCTV line summary FT pickett. The size of the executable file for downloading is 25 megabytes and not 34,908 bytes.

Information on the results of the manhole inspections and a table of pipe segments are provided under Amendment 1 File Name "A01R0015.exe". The Description is changed from "Download Bundle Cals & Specs" to "Download Bundle Specs, MH Inspection Forms, & Pipe Segment Summary".

BID SCHEDULE

(Amounts to be shown in both words and numerals)

STANDARD PAYMENT ITEMS

BID FORM PROJECT # DACA65-01-R-0015, FORT PICKETT SANITARY SEWER REHABILITATION

CLIN

SUPPLIES/SERVICES

The U.S. ARMY CORPS OF ENGINEERS, NORFOLK DISTRICT will receive sealed bids for the furnishing of all equipment, labor and materials and the performing of all work for this project. The work includes: rehabilitating approximately 111,140 l.f. of 8 thru 30 inch gravity sanitary sewer and replacement of approximately 8,870 l.f. of 6 thru 12" gravity sanitary sewer, one medium size lift station with approximately 4216 l.f. of 6" force main, rehabilitation of approximately 451 sanitary sewer manholes (for a total of approximately 4,200 v.l.f. of rehabilitation, replacement of approximately 17 manholes, and all associated work as specified in the drawings and documents.*

*In addition to the above, the contractor must meet the following:

(1) CONTRACTOR EXPERIENCE

- a. **The General Contractor and all sub-contractors performing CIPP work must have CIPP experience.**
- b. The Contractor for the cured-in-place rehabilitation of sewers must have a minimum of 3 years experience using the product proposed and have installed at least 10,000 linear feet of the proposed product for both categories of collection system pipe diameters 8-inches to 18-inches (Category 1) **and** 21-inches to 30-inches (Category 2).
- c. All workers performing work on the cured-in-place rehabilitation of sewer must be certified by the cured-in-place rehabilitation system supplier as qualified to perform work with the proposed product.
- d. **The General Contractor superintendent and all sub-contractor superintendents** for the job must have supervised jobs in which at least 5,000 linear feet in each category of 8-inch to 18-inch (Category 1) and 21-inch to 30-inch (Category 2) collection system pipe has been rehabilitated using the product proposed.
- e. The Contractor shall be licensed by the liner process manufacturer.
- f. The Contractor must have previous comprehensive construction-sequencing planning which, at minimum, shall include experience in:
 1. Scheduling;
 2. Identification of set-up locations for lining installation.
 3. Lining procedures.
 4. Bypass Pumping Plan in accordance with Section 02740, Bypass Pumping.
 5. Traffic Control Plan in accordance with VDOT **(or other similar state)** Requirements.
- g. The Contractor for the rehabilitation of the sewer manholes must have a minimum of two years experience using the product proposed and have installed at least 500 vertical linear feet of the proposed product for collection system manholes.

(2) MANUFACTURER PRODUCT EXPERIENCE:

- a. The product proposed for the cured-in-place rehabilitation of sewers must have been in use for at least three years for pipeline diameters 8-inch and above, and a minimum of 20,000 linear feet of the product must have been installed in pipe diameters 8-inches and above.
- b. The manufacturer shall have experience in:
 - i. Providing classroom installation instruction and certification.
 - ii. Designing and certifying liner thickness.
- c. The product proposed for the rehabilitation of sewer manholes must have been in used for at least three years and a minimum of 1,000 vertical linear feet of the product must have been installed in sewer collection system manholes.
- d. The product proposed for the in-situ point repair rehabilitation of the sewers must have been in use for at least three years for pipeline diameters 27-inch and above, and a minimum of 100 point repairs must have been installed in pipe diameters 27-inches and above

Bidders must be licensed (registered) Class A contractors in Virginia or of equal state registration.

A Formal Site Visit will be held at 10:00 a.m. on May 1, 2001 at the Fort Pickett Conference Room, Building 472, Fort Pickett, Virginia. This will be the only time the site will be available for a visit. Magnitude of construction is estimated to be between \$5,000,000 and \$10,000,000.00. Duration of the project is 720 calendar days.

BASE BID - SCHEDULE I ITEM # <u>SANITARY SEWER SYSTEM (CPPP AND MANHOLE</u> <u>REHABILITATION AND REPLACEMENT)</u>		<u>QUANTITY</u>	<u>UNIT</u>	<u>PRICE</u>	<u>AMOUNT</u>
001	Performance and Payment Bond, , exclusive of bid items 2 thru 27	1	LS	\$	\$
002	Reline existing 8" sanitary sewer pipe, complete, including all work incidental thereto as shown on the drawings and as specified, exclusive of bid items 1 and 3 thru 27.	56,284	LF	\$	\$
003	Reline existing 10" sanitary sewer pipe, complete, including all work incidental thereto as shown on the drawings and as specified, exclusive of bid items 1, 2, and 4 thru 27.	13,240	LF	\$	\$
004	Reline existing 12" sanitary sewer pipe, complete, including all work incidental thereto as shown on the drawings and as specified, exclusive of bid items 1, 2, 3, and 5 thru 27.	18,400	LF	\$	\$
005	Reline existing 15" sanitary sewer pipe, complete, including all work incidental thereto as shown on the drawings and as specified, exclusive of bid items 1 thru 4 and 6 thru 27.	5,415	LF	\$	\$
006	Reline existing 18" sanitary sewer pipe, complete, including all work incidental thereto as shown on the drawings and as specified, exclusive of bid items 1 thru 5 and 7 thru 27.	4,335	LF	\$	\$
007	Reline existing 21" sanitary sewer pipe, complete, including all work incidental thereto as shown on the drawings and as specified, exclusive of bid items 1 thru 6 and 8 thru 27	8080	LF	\$	\$
008	Reline existing 24" sanitary sewer pipe, complete, including all work incidental thereto as shown on the drawings and as specified, exclusive of bid items 1 thru 7 and 9 thru 27.	4,185	LF	\$	\$
009	Reline existing 30" sanitary sewer pipe, complete, including all work incidental thereto as shown on the drawings and as specified, exclusive of bid items 1 thru 8 and 10 thru 27.	1,005	LF	\$	\$
010	Replace existing/install new 6" sanitary sewer pipe, complete, including all work incidental thereto as shown on the drawings and as specified, exclusive of bid items 1 thru 9 and 11 thru 27.	5,320	LF	\$	\$
011	Replace existing/install new 8" sanitary sewer pipe, complete, including all work incidental thereto as shown on the drawings and as specified, exclusive of bid items 1 thru 10 and 12 thru 27.	2,155	LF	\$	\$
012	Replace existing/install new 12" sanitary sewer pipe, complete, including all work incidental thereto as shown on the drawings and as specified, exclusive of bid items 1 thru 11 and 13 thru 27.	1385	LF	\$	\$
013	Replace existing/install new 15" sanitary sewer pipe, complete, including all work incidental thereto as shown on the drawings and as specified, exclusive of bid items 1 thru 12 and 14 thru 27	500	LF	\$	\$

014	Rehabilitate approximately 451 manholes, complete, including all work incidental thereto including manhole frame and covers as required and other work as shown on the drawings and specified, exclusive of items 1 thru 13 and 15 thru 27.	4240	VLF	\$	\$
015	Replace manholes, complete, including all work incidental thereto as shown on the drawings and specified, exclusive of items 1 thru 14 and 16 thru 27.	10	EA	\$	\$
016	Construct new manholes, complete, including all work incidental thereto as shown on the drawings and specified, exclusive of items 1 thru 15 and 17 thru 27.	17	EA	\$	\$
017	Construct sanitary sewer pump station and 4220 lf of 6" sanitary sewer force main, complete, including all work incidental thereto as shown on the drawings and specified, exclusive of items 1 thru 16, 18 thru 27.	1	LS	\$	\$
018	Repair road cuts for all utility line new work, rehab, and/or replacement work, construct two (2) wash rack diversion structures, replace swimming pool settling chamber cover, install miscellaneous drainage structures, and other miscellaneous work items, complete, including all work incidental thereto as shown on the drawings and specified, exclusive of items 1 thru 17 and 19 thru 27.	1	LS	\$	\$
019	Point repair by in-situ structural repair, complete, including all work incidental thereto as shown on the drawings and specified, exclusive of items 1 thru 18 and 20 thru 27.	150	LF	\$	\$
020	Point repair 8" sanitary sewer pipe by external excavation and pipe replacement, complete, including all road cut repairs and all work incidental thereto as shown on the drawings and specified, exclusive of items 1 thru 19 and 21 thru 27.	115	LF	\$	\$
021	Point repair 10" sanitary sewer pipe by external excavation and pipe replacement, complete, including all road cut repairs and all work incidental thereto as shown on the drawings and specified, exclusive of items 1 thru 20 and 22 thru 27.	30	LF	\$	\$
022	Point repair 12" sanitary sewer pipe by external excavation and pipe replacement, complete, including all road cut repairs and all work incidental thereto as shown on the drawings and specified, exclusive of items 1 thru 21 and 23 thru 27.	60	LF	\$	\$
023	Point repair 15" sanitary sewer pipe by external excavation and pipe replacement, complete, including all road cut repairs and all work incidental thereto as shown on the drawings and specified, exclusive of items 1 thru 22 and 24 thru 27.	30	LF	\$	\$
024	Point repair 18" sanitary sewer pipe by external excavation and pipe replacement, complete, including all road cut repairs and all work incidental thereto as shown on the drawings and specified, exclusive of items 1 thru 23 and 25 thru 27.	30	LF	\$	\$

025	Point repair 21" sanitary sewer pipe by external excavation and pipe replacement, complete, including all road cut repairs and all work incidental thereto as shown on the drawings and specified, exclusive of items 1 thru 24 and 26 thru 27.	20	LF	\$	\$
026	Point repair 24" sanitary sewer pipe by external excavation and pipe replacement, complete, including all road cut repairs and all work incidental thereto as shown on the drawings and specified, exclusive of items 1 thru 25 and 27.	10	LF	\$	\$
TOTAL AMOUNT BASE BID - SCHEDULE I					\$
OPTION ITEMS - SCHEDULE II					
027	Option A. Replace existing 6" sanitary sewer lateral pipe, complete, including all road cut repairs and all work incidental thereto as shown on the drawings and as specified, exclusive of bid items 1 thru 26.	34,020	LF	\$	\$
TOTAL AMOUNT OPTION ITEMS - SCHEDULE II					\$
TOTAL ESTIMATED AMOUNT BASE BID PLUS OPTION ITEMS SCHEDULES I and II					\$

NOTE 1:

All quantities are estimates. The Contractor will be paid on the awarded unit prices offered for each type of work actually performed. Failure of the Contractor to perform all quantities described in the bid schedule will not entitle the Contractor to any equitable adjustment in contract price. Further, failure of the Government to require performance of all quantities described in the bid schedule, will not entitle the Contractor to any adjustment in contract price. The Contractor shall not exceed the total estimated quantities or the total contract award price without prior approval of the Contracting Officer.

NOTE 2:

The Government reserves the right to require the Contractor to perform additional specified work. The Contractor will be paid on the awarded unit prices offered for each type of additional work actually performed.

NOTE 3:

Site Specific Parameters: The information listed in Table 02732-2 is specific to each manhole to manhole run of pipe. The Bidder shall use for design the information provided by the Government and information the Bidder collects during site visits for each manhole to manhole run.

Table 02732-2 Site-Specific Design Parameters	
Ovality	Notes 1, 2
Ground Water Depth Above Invert	Notes 1, 3
Soil Depth Above Crown	Note 1
Live Load	Notes 1, 4
Design Condition (Fully Deteriorated)	Notes 1, 5
CIPP Thickness	Notes 1, 6, 7, 8

Notes - Table 02732-2:

1. Design thickness and complete site-specific design, in accordance with ASTM F-1216-93 (Appendix X1), shall be submitted with the bid and attached as Appendix A.
2. The Bidder shall estimate the ovality by viewing the videotapes and other information available at the Corps' District Office. If tapes are not available, the Bidder shall assume an ovality of 3%. In cases where the ovality exceeds 10%, the Bidder may consider employing alternative design methods (such as beam design methods) to determine the pipe thickness.
3. In the absence of accurate water table information or high water elevation observed during the site visit (stream, ponds, etc.), the Bidder shall assume a seasonal groundwater elevation variation of 0 to 6 feet below the ground surface.
4. CIPP is subjected to traffic live loads as calculated by AASHTO Standard Specifications for Highway Bridges, HS-20-44 Highway Loading.
5. The Bidder shall assume the pipe segments are fully deteriorated.
6. Thickness specified (designed by the Bidder and approved by the COR) is the final, in-ground thickness required. Measured sample thickness will not include polyurethane or polyethylene coatings, any layer of the tube not fully and verifiably impregnated with resin, or any portion of the tube not deemed by the COR to be a structural component of the composite.
7. The Contractor must consider any factors necessary to ensure the final, cured-in-place pipe thickness is not less than that specified (designed by the Bidder and approved by the COR) above. These factors include any stress applied to the material sanitary sewer systems.
8. Design thickness provided by the Contractor at the time of bid shall be evaluated by the CO prior to award.